

研究论文

超声照射下血卟啉(HP)对牛血清白蛋白(BSA)损伤的研究

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**摘要** 用紫外-可见光谱(UV)和圆二色(CD)光谱研究了超声波激活血卟啉(HP)对牛血清白蛋白(BSA)的损伤,探讨了超声波照射时间、HP浓度、离子强度和酸度等因素对BSA损伤的影响.结果表明,在一定条件下,BSA的损伤程度随着超声波照射时间的增长和HP浓度的增大而增大,

而离子强度和酸度对BSA损伤的影响较为复杂.这一结果对声动力学(SDT)疗法应用于临床具有重要的意义.

**关键词** [超声](#) [血卟啉](#) [牛血清白蛋白](#)

分类号

**Investigation on Damage of Bovine Serum Albumin by Hematoporphyrin under Ultrasonic Irradiation**

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**Abstract** The damage of bovine serum albumin (BSA) under ultrasonic irradiation in the presence of hematoporphyrin (HP) was studied by UV and CD spectra and the influence of irradiation time, HP concentration, ionic strength and acidity was also detected. The results showed that under a certain condition, the damage degree of BSA was increased with the enhancement of the irradiation time and HP concentration, while the influence of ionic strength and acidity was complicated. The research results were of great significance for driving sonodynamic treatment to clinic application.

**Key words** [ultrasound](#) [hematoporphyrin](#) [bovine serum albumin](#)

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